



U.S. A Cation No. 09/961,335 Attorney Docket No.: 05788.0182

ABSTRACT OF THE DISCLOSURE

An optical fiber cable having a tube in which is inserted at least one optical fiber and a mixture of a water-mediated expanding powder and a material with a particle size less than that of the water-mediated expanding powder is inserted in the tube. The percentage of the powder in the mixture is in an amount such as to block the flow of water to within a distance of less than about three meters from the point of ingress of the water in twenty-four hours and such as to bring about an increase in attenuation in the optical fiber, after it has been housed in the cavity, of less than 0.02 dB/km.